CLAIMS

1.   A method for allowing a Mobile IPv4 Mobile Node to communicate from an
IPv6 visited network, and across IPv6 networks, back to a Mobile IPv4 Home Agent,
5   in a Mobile IPv4 Network, comprising:
         -    a Mobile Node supporting Mobile IPv4 registration procedures including IPv6
              addressing details to support MN – HA communication;
         -    a Home Agent supporting connectivity to both IPv4 and IPv6 networks to
              facilitate remote access;
10   -   tunneling of IPv4 traffic over IPv6 networks from the Mobile Node;
         -    tunneling of Mobile IPv4 traffic over IPv6 networks from the Home Agent.

2.   A method according to claim 1, wherein the Mobile Node acquires an IPv6
address in the visited network.

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3.   A method according to claim 2 wherein the Mobile Node sends a MIPv4
Registration Request over IPv6 using the acquired IPv6 address as source address,
and the Home Agent IPv6 address as destination address.

20 4.   A method according to claim 2, wherein the Mobile Node includes the
acquired IPv6 address as an IPv6 care-of address extension in the Mobile IPv4
Registration Request.

5.   A method according to claim 1, wherein the Home Agent extracts the IPv6
25 care-of address from the Registration Request extension and uses it as the tunnel
endpoint for the IPv4 in IPv6 tunnel back to the Mobile Node.

6.   A method according to claim 1, wherein the Mobile Node tunnels IPv4
packets in IPv6 headers, destined for the Home Agent.

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7.   A method according to claim 1, wherein the Mobile Node de-capsulates IPv6
tunneled IPv4 packets from the Home Agent.

8.   A method according to claim 1, wherein the Home Agent accepts Mobile IPv4 Registration Requests arriving on an IPv6 network.

9.   A method according to claim 1, wherein the Home Agent tunnels IPv4 packets in IPv6 headers, destined for the Mobile Node.

10.   A method according to claim 1, wherein the Home Agent de-capsulates IPv6 tunneled IPv4 packets from the Mobile Node.

11.   A method according to claim 1, wherein the Home Agent employs UDP tunneling from the HA to the MN in accordance with RFC 3519.